



# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service  
United States Department of Agriculture

OCTOBER 22, 2002

TM GRAIN TRANSPORT COST INDICATORS	Truck	Rail	Barge	Ocean	
				Gulf	PNW
Indicator Value * for 10/16	98		114	109	94
Compared to Last Week	unchanged		up	up	down
* Indicator: Base Year 2000=100; Cost Data, Weekly Updates include Truck=Diesel, Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Quarterly Updates for Ocean Vessel based on Routes to Japan					

Oct. 24-25	Ports and Logistics 2002	Johor Bahru, Malaysia	+60 38 023 5352 <a href="mailto:info@transportevents.com">info@transportevents.com</a>
Oct. 24-26	23 <sup>rd</sup> Annual Int'l Irrigation Show & Conf.	New Orleans, LA	703-536-7080 (tel.)
Oct. 27-30	2002 American Trucking Management (ATA) Conference & Exhibition	Orlando, FL	703-838-1700 (tel.) <a href="http://www.trucking.org">www.trucking.org</a>
Nov. 7-8	MARC 2000: Midwest Area River Coalition Annual Meeting	St. Louis, MO	314-436-7303 (ph) <a href="http://www.marc2000.org">http://www.marc2000.org</a>
Nov. 12-15	International Association of Maritime Economists Annual Meeting and Conference	Panama City, Panama	507-263-6716 (ph) 507-263-6804 (fax)
Nov. 14-15	The Fertilizer Institute Outlook Conference	Arlington, VA	202-962-0490 (ph)
Nov. 16-20	95 <sup>th</sup> Nat'l Industrial Transportation League's (NITL) Annual Meeting/2002 Transcomp Exhibition	Anaheim, CA	703-524-5011 (ph) <a href="mailto:info@nitl.org">info@nitl.org</a>
Nov. 19-20	TOC 2002 Americas - The Practical Ports & Terminals Event for the Americas	Miami, FL	Michelle Fisk <a href="mailto:michelle.fisk@informa.com">michelle.fisk@informa.com</a>
Dec. 8-10	Nat'l. Grain and Feed Assoc. (NGFA) 31 <sup>st</sup> Annual Country Elevator Council Meeting, 6 <sup>th</sup> Annual Feed Industry Council Meeting & Trade Show.	St. Louis, MO	202-289-0873 (tel.) <a href="mailto:ngfa@ngfa.org">ngfa@ngfa.org</a>
Dec. 11-13	American Seed Trade Association (ASTA) 32 <sup>nd</sup> Soybean Seed and 57 <sup>th</sup> Corn & Sorghum Seed Conference & Seed Expo	Chicago, IL	888-890-7333 (ph) 703-837-8140 (ph)
Jan. 26-31, '03	Wheat Industry Conference	Albuquerque, NM	202-547-7800 (ph) <a href="mailto:wheatworld@wheatworld.org">wheatworld@wheatworld.org</a>
Feb. 27-Mar. 1	Commodity Classic Trade Show	Charlotte, NC	Beth Musgrove <a href="mailto:musgrove@ncga.com">musgrove@ncga.com</a> 314-275-9915 (ph)

Report is prepared by Deen Olowolayemo, Johnny Hill and Hooshang Fazel, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at [www.ams.usda.gov/tmd/grain.htm](http://www.ams.usda.gov/tmd/grain.htm) or contact Surajudeen.Olowolayemo@usda.gov

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation or marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202)720-2600. To file a complaint, write USDA, Director of Civil Rights, Room 326-W, Whitten Building, 14<sup>th</sup> and Independence Avenue, SW, Washington, DC, 20250-9410, or call (202) 720-

5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**Contents**

Rail .....	<u>3</u>
Barge .....	<u>5</u>
Truck .....	<u>6</u>
Grain Exports	<u>7</u>
Container ...	<u>9</u>

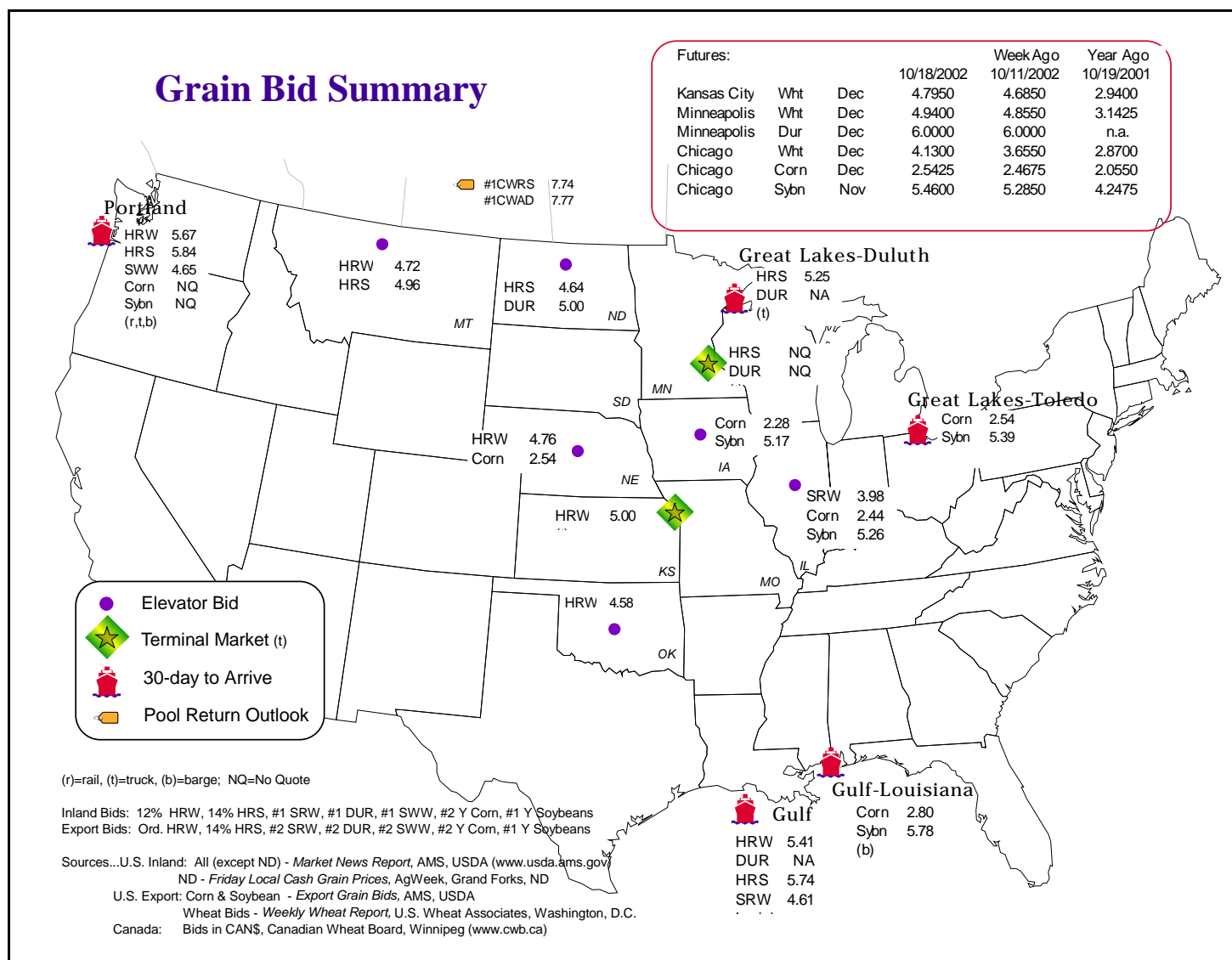
The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

### Market Update: U.S. Origins to Export Position Price Spreads

Per Bushel

Commodity	Origin--Destination	This week	Last week
Corn	IL -- Gulf	-0.36	-0.37
Corn	NE -- Gulf	-0.26	-0.21
Soybean	IA -- Gulf	-0.61	-0.62
HRW	KS -- Gulf	-0.41	-0.38
HRS	ND -- Portland	-1.20	-1.26

The **Grain Bid Summary** illustrates the market relationships for corn, soybeans, and five varieties of wheat among selected origins and destinations. Positive and negative adjustments in the differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.



# RAIL TRANSPORTATION

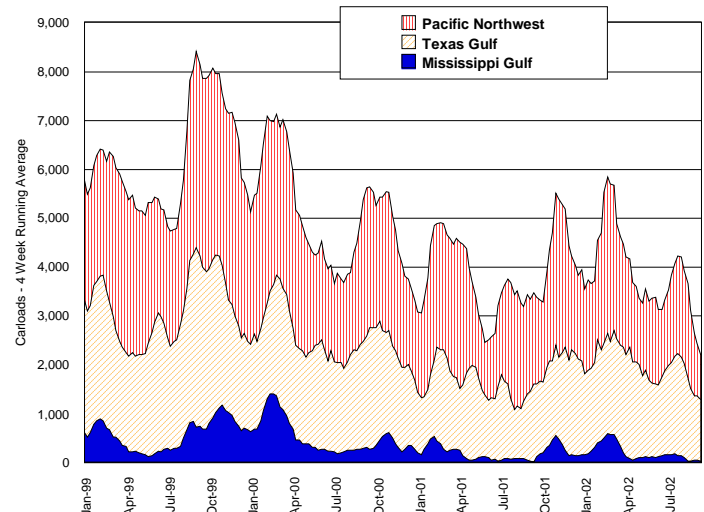
## Rail Deliveries to Port

Carloads

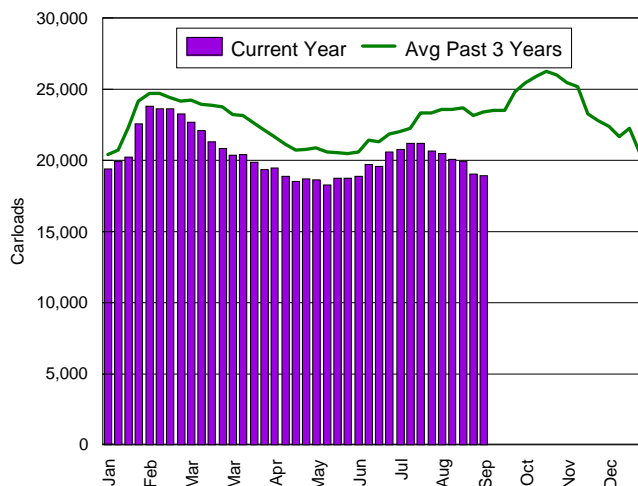
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
10/2/02	379	469	1,361	78	457
10/09/02	436	569	3,270	351	787
YTD 2002	8,412	69,594	76,477	15,861	24,273
YTD 2001	7,089	61,145	84,941	18,995	26,084
% of Last Year	119%	114%	90%	84%	93%
Total 2001	10,022	81,804	111,376	26,604	229,806
Total 2000	25,767	104,473	128,414	14,816	273,470

Source: Transportation &amp; Marketing/AMS/USDA; (\*) Incomplete Data

## Rail Deliveries to Port



## Grain Car Loadings for Class I Railroads



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

## Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated and Grain Service Index

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
10/12/02	3,324	3,758	8,322	452	6,398	22,254	4,064	4,489
This Week Last Year	2,405	3,019	8,893	572	6,638	21,527	5,145	4,813
2002 YTD	110,026	127,203	305,590	21,521	269,423	833,763	157,906	152,561
2001 YTD	118,371	124,056	330,924	19,407	273,069	865,827	200,178	183,275
2001 Total	151,864	163,018	428,603	26,330	347,156	1,116,971	254,982	232,461
2000 Total	147,708	153,905	425,849	26,515	364,785	1,118,762	160,749	239,670

Dec-01 95.5 93.1 100.9 101.0 98.0 97.5

Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online for Rail Carrier

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

**Railroad Car 'Auction' Results**

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Sep-02	Oct-02	Nov-02
COT/N. Grain	no bid	no bid	no bid
COT/S. Grain	no bid	no bid	\$0
GCAS/Region 2	no bid	no bid	no offer
GCAS/Region 4	no bid	no bid	no offer

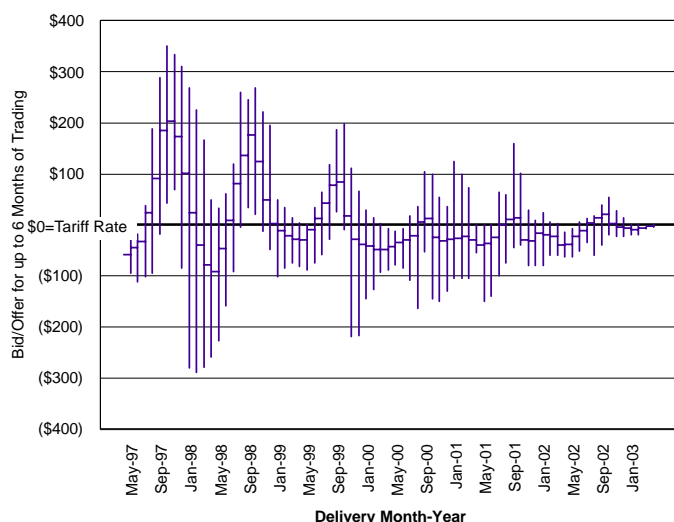
Source: Transportation &amp; Marketing/AMS/USDA.

(COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

**Secondary Rail Car Market**

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Aug-02	Sep-02	Oct-02	Nov-02
BNSF-GF	\$(5)	\$0	\$(2)	\$(3)
UP-Pool	\$(55)	\$(35)	\$(5)	\$(10)

**Secondary Rail Market Bid****Tariff Rail Rates for Unit Train Shipments**

October 2002

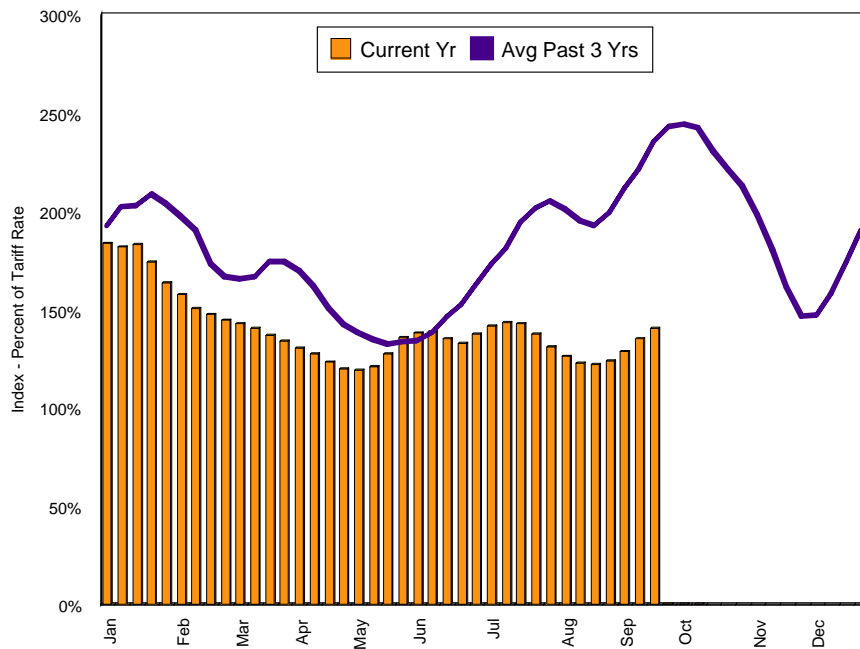
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
10/07/02	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
10/07/02	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
10/07/02	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
10/07/02	43586	Wheat	Kansas City, MO	Portland, OR	\$4,347	\$47.92	\$1.30
10/07/02	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
10/07/02	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
10/07/02	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
10/07/02	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
10/07/02	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
10/07/02	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat &amp; Soybeans 60 lbs/bu

## BARGE TRANSPORTATION

**Illinois River Barge Rate Index - Rate Quotes**



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating barge rate per ton:  
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

### BARGE RATE QUOTES: Southbound Barge Freight

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	10/16/02	10/9/02	Nov '02	Jan '03
Twin Cities	212	204	190	0
Mid-Mississippi	215	206	173	0
Illinois River	206	200	161	178
St. Louis	175	176	137	123
Lower Ohio	169	159	156	128
Cairo-Memphis	174	164	132	116

Source: Transportation & Marketing /AMS/USDA; nq=no quote

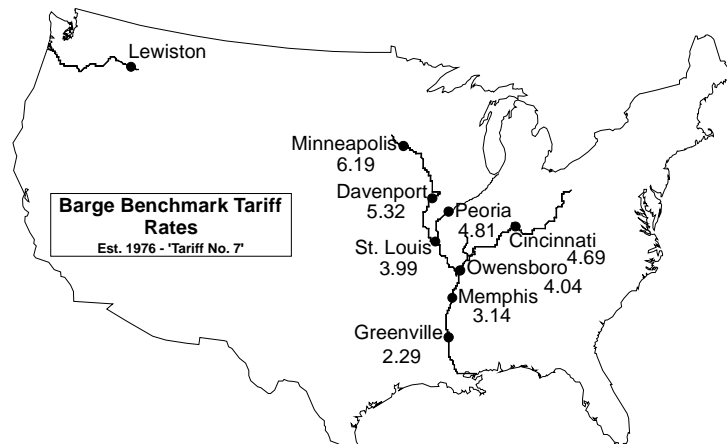
### BARGE FUTURES MARKET

#### Southbound Barge Freight Nominal/Cash Basis Values

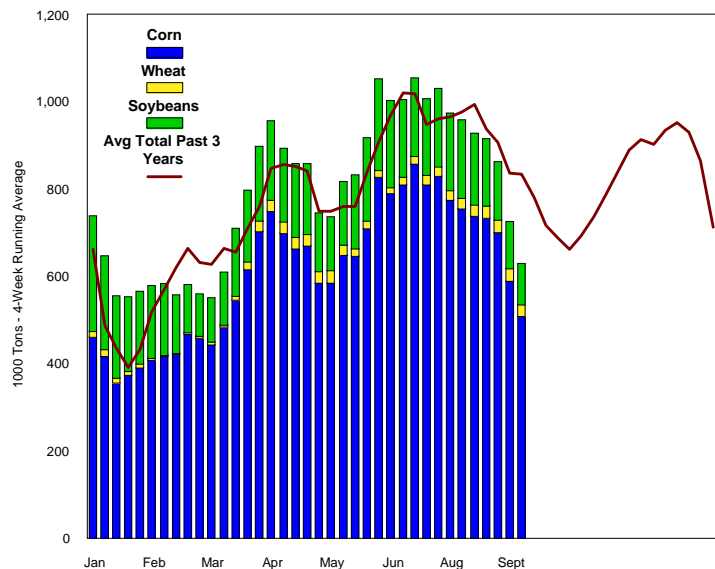
Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
10/22/02	St. Louis	Aug	n/a	n/a
		Oct	n/a	205
		Dec	n/a	125
	Illinois River	Feb	n/a	128
		Mar	n/a	128
		Aug	n/a	n/a
		Oct	n/a	215
		Dec	n/a	163
		Feb	n/a	170
		Mar	n/a	155

Source: St. Louis Merchants Exchange



## Barge Movements on the Mississippi River (Lock 27)



## Barge Grain Movements

for week ending 10/12/02

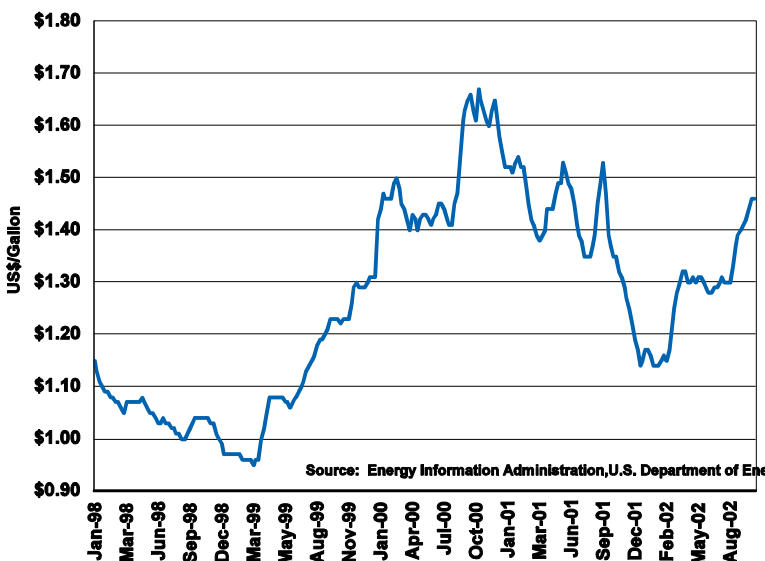
	Corn	Wht	Sybn	Total
	1,000 Tons			
Mississippi River				
Rock Island, IL (L15)	122	17	162	301
Winfield, MO (L25)	241	20	291	565
Alton, IL (L26)	491	39	382	928
Granite City, IL (L27)	475	35	389	913
Illinois River (L8)	172	11	108	293
Ohio River (L52)	26	6	24	69
Arkansas River (L1)	1	32	10	44
2002 YTD	27,229	2,151	7,905	38,534
2001 YTD	25,078	2,169	6,646	35,374
% of Last Year	109%	99%	119%	109%
Total 2001	31,878	2,679	10,616	47,091

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

Source: U.S. Army Corp of Engineers.

## TRUCK TRANSPORTATION

## Weekly U.S. Retail Road Diesel Price, Including Taxes



The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

## Crude Oil Prices

US\$ per Barrel	This Week	Last Week	Average 2001*
Light Sweet Crude (NYMEX)	28.51	28.34	22.96
Brent Crude	26.76	26.26	

Source: [www.eia.doe.gov](http://www.eia.doe.gov); \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London

<b>GRAIN EXPORTS</b>
----------------------

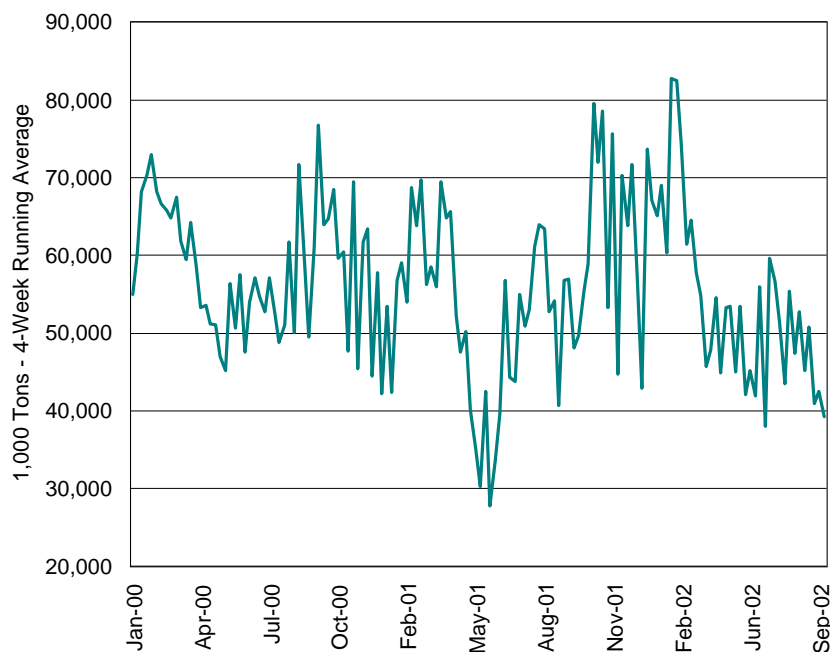
**U.S. Export Balances** (1,000 Metric Tons)

	<i>HRW</i>	<i>SRW</i>	<i>HRS</i>	<i>SWW</i>	<i>DUR</i>	<i>All</i>	Corn	Soybean	Total
Unshipped Export Balances									
10/10/02	1,693	485	1,675	819	107	4,779	7,066	7,439	19,284
This Week Year Ago	1,174	1,087	868	550	227	3,906	6,944	8,511	19,361
Cumulative Exports-Crop Year									
01/02 YTD	3,197	1,070	2,366	1,187	338	8,158	3,819	1,227	13,204
00/01 YTD	2,889	2,079	1,988	1,158	522	8,636	5,287	17,713	31,636
99/00 Total	9,858	4,710	6,305	5,413	1,232	27,518	37,220	24,516	89,254
98/99 Total	7,387	3,645	7,864	6,105	963	25,965	44,476	24,501	94,942
97/98 Total	9,867	6,792	8,918	6,443	897	32,918	55,769	23,550	112,237

Source: Foreign Agricultural Service YTD-Year-to-Date ([www.fas.usda.gov](http://www.fas.usda.gov)) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31**Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons**

	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Pacific</i>	<i>Mississippi</i>	<i>Texas</i>
10/17/02	328	24	265	172	740	283	88	22	0	617	1,195	110
2002 YTD	6,923	3,032	1,771	4,399	30,024	11,809	4,864	259	907	11,726	46,233	6,030
2001 YTD	7,686	4,353	1,737	4,952	28,286	11,058	4,455	242	1,103	13,776	44,296	5,799
% of Last Year	70%	50%	104%	65%	85%	66%	70%	55%	90%	66%	77%	72%
2001 Total	10,007	5,877	1,647	6,829	34,991	17,996	6,984	470	1,008	17,530	59,816	8,462

Source: Federal Grain Inspection Service YTD-Year-to-Date

**U.S. Grain Inspected for Export****Select Canadian Port Export Inspections**

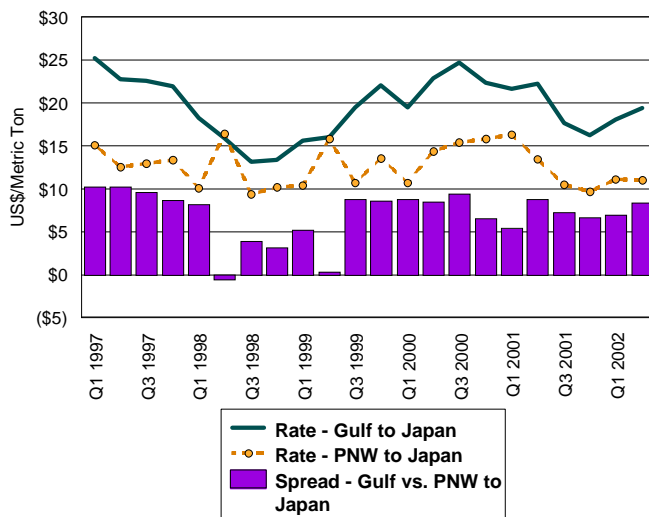
1,000 Metric Tons, Week End Summary

	<u>Wheat</u>	<u>Durum</u>	<u>Barley</u>
10/17/02			
Vancouver	318	21	3
Prince Rupert	366	18	
Prairie Direct	102	58	52
Thunder Bay	141	94	33
St. Lawrence	1,659	305	42
2001/02 YTD	2,586	496	130
2002/03 YTD	1,310	731	88
% of Last Year	197%	68%	148%

Source: Canadian Grains Commission, Crop Year 8/1- 7/31

**Port Region Ocean Grain Vessels**

	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
10/10/02	43	33	73	14	2
10/17/02	41	52	72	14	1
2001 Range	(13..65)	(28..64)	(46..81)	(1..18)	(4..20)
2001 Avg	36	48	63	9	12

**Gulf Port Region Grain Vessel Loading  
Past 7 Days****Grain Vessel Rates to Japan****Quarterly Ocean Freight Rates**

Average Rates &amp; Percentage Changes, U.S. Dollars/Metric Ton

	2002 2 <sup>nd</sup> Qtr	2001 2 <sup>nd</sup> Qtr	% Change		2002 2 <sup>nd</sup> Qtr	2001 2 <sup>nd</sup> Qtr	% Change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	\$19.43	\$22.31	-13%	Japan	\$11.03	\$13.05	-18%
Mexico	\$46.92	\$17.84	63%				
Venezuela		\$14.76	-				
N. Europe	\$13.58	\$16.93	-20%	<b>Argentina to</b>			
N. Africa	\$15.84	\$19.52	-19%	Med. Sea	\$16.98	\$26.08	-35%
Med. Sea	\$12.62	\$15.80	-20%	N. Europe	\$17.16	\$19.68	-13%
Black Sea		\$21.16	-	Japan	\$25.10	\$26.62	-6%

Source: Transportation &amp; Marketing/AMS/USDA; (\*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

**Ocean Freight Rates for Select Shipments - week ending 10/19/02**

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$/Ton)
U.S. Gulf	Mexico	Corn	Oct 20/25	30,000	\$7.50
U.S. Gulf	Egypt	Heavy Grains	Oct 16/20	60,000	\$12.60
U.S. Gulf	Japan	Heavy Grain	Nov 11/22	54,000	\$24.00
Paranagua (Brazil)	Tunisia	Corn	Oct 17/30	25,000	\$22.00
Durban (S. Africa)	Japan	Heavy Grains	Oct 20/30	20,000	\$27.00
Bin Qasim (Pakistan)	Peru	Wheat	Oct 22/26	35,000	\$20.25

Source: Maritime Research Inc.; rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

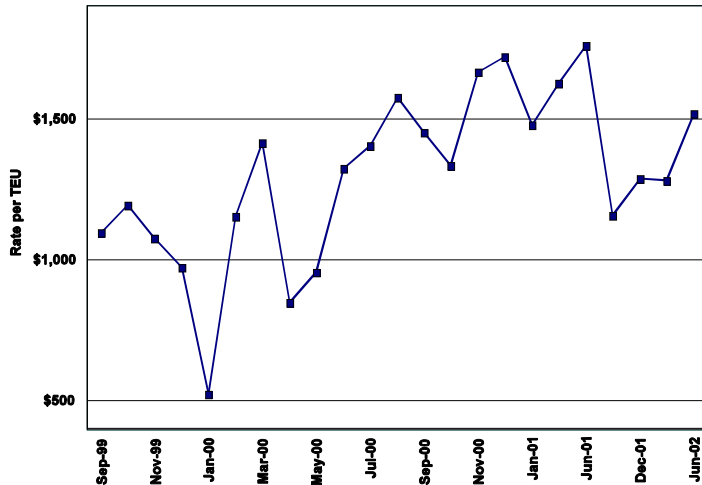
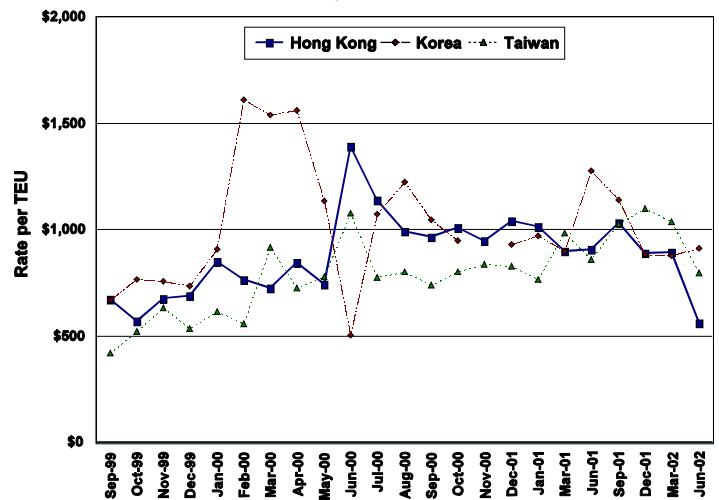


CONTAINER

**Container Ocean Freight Rates**

Monthly Weighted Averages Based on Shipping Line Monthly Mkt. Share

Source: Transportation &amp; Marketing/AMS/USDA

**Container Rates - Soybeans**  
Seattle, WA Origin to Tokyo, Japan**Container Rates - Feed Grain**  
Seattle, WA Origin to Selected Destinations

Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.